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MYOCARDIAL ISCHEMIA AND INFARCTION

THE PROGNOSTIC VALUE OF THE THROMBOLYSIS IN MYOCARDIAL INFARCTION (TIMI) RISK INDEX AFTER PRIMARY PERCUTANEOUS CORONARY INTERVENTION FOR ST-ELEVATION MYOCARDIAL INFARCTION AT LONG-TERM FOLLOW-UP

ACC Poster Contributions
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Background: In order to optimize the use of novel therapies and improve outcomes in high-risk ST-elevation myocardial infarction (STEMI) patients, risk stratification is of importance. The Thrombolysis In Myocardial Infarction Risk Index (TIMI-RI) for STEMI was developed to get insight in short-term outcomes. In this study we assessed discriminative value of the TIMI-RI in predicting short and long-term mortality in STEMI patients treated with primary percutaneous coronary intervention (PPCI).

Methods: We used registry data from STEMI patients undergoing PPCI in a high-volume PCI centre in The Netherlands. Data on all-cause mortality was collected up to 5 years of follow-up. Patients were divided into tertiles based on TIMI-RI (<17.4, >17.4 and <27.9, >27.9). Cumulative event rates were estimated with the Kaplan-Meier method and compared with a log-rank test. A landmark was set at 30 days. Discrimination of the TIMI-RI was assessed with C-statistics.

Results: We included 1806 patients with a mean follow-up of 1046 days. The cumulative mortality is shown in figure 1. Mortality was significantly higher in higher TIMI-RI categories before and after the 30-day landmark (p<0.001). Overall the discriminative value of the TIMI-RI for mortality estimated by the C statistic was 0.791. The C statistic of the TIMI-RI was respectively 0.851 and 0.720 for short and long-term prediction of mortality.

Conclusion: TIMI-RI predicts not only short but also long-term mortality in STEMI patients treated with PPCI.

Figure 1. Landmark cumulative mortality curves according to TIMI risk index